

Table S2. Relative amount of individual diterpenes produced by the recombinant diTPS characterized in this study. Major reaction products are highlighted in **bold**. Products representing greater than 1% of the total are reported. Values are given as the average of at least 5 replicates.

Protein #1	Protein #2	pimaradiene	sandaracopimaradiene	isopimaradiene	palustradiene	levopimaradiene	abietadiene	dehydroabietadiene	neoabietadiene
<i>Pinus banksiana</i>									
<i>PaD611A</i>	<i>PbmISO1</i>		12.2 ± 0.027	87.8 ± 0.027					
<i>PaD611A</i>	<i>PbmPIM1</i>	95.1 ± 1.1	1.66 ± 0.023				1.73 ± 0.62		
<i>PbLAS1</i> *					2.12 ± 0.0077	6.58 ± 0.049	81.1 ± 0.084		8.75 ± 0.037
<i>PbLAS1</i>	<i>PbmISO1</i>		1.26 ± 0.087	7.98 ± 0.73	2.08 ± 0.022	5.87 ± 0.053	74.1 ± 0.83		7.71 ± 0.037
<i>PbLAS1</i>	<i>PbmPIM1</i>	1.64 ± 0.0088			2.09 ± 0.040	6.47 ± 0.39	79.9 ± 0.74		8.53 ± 0.32
<i>Pinus contorta</i>									
<i>PaD611A</i>	<i>PcmISO1</i>		10.5 ± 0.37	89.5 ± 0.37					
<i>PaD611A</i>	<i>PcmPIM1</i>	99.2 ± 0.15							
<i>PcLAS2</i>					2.16 ± 0.066	9.73 ± 0.69	72.2 ± 2.2	3.37 ± 2.0	12.2 ± 0.66
<i>PcLAS1</i> *					2.06 ± 0.025	5.78 ± 0.33	82.5 ± 0.64		7.95 ± 0.32
<i>PcLAS1</i>	<i>PcmISO1</i>		1.55 ± 0.50	10.5 ± 4.2	1.92 ± 0.064	5.08 ± 0.12	72.8 ± 4.4		7.01 ± 0.24
<i>PcLAS1</i>	<i>PcmPIM1</i>	3.69 ± 1.4			1.97 ± 0.034	5.35 ± 0.038	80.0 ± 1.4		7.5 ± 0.096

* LC/MS analysis of reaction products revealed two epimers of 13-hydroxy-8(14)-abietene as major products, consistent with the previously reported activity of *Picea abies* LAS (Keeling et al., 2011).